

1. Listing of the Claims:

1.(Currently Amended) A method for improving the perceived resolution of a color matrix display with at least one pixel, comprising: ~~the steps of~~

subdividing an incident color channel signal of a ~~to said~~ pixel into a first and second signal component, the first signal component being a low pass component and the second signal component being a high pass component;

applying a gain factor to one of said signal components, the gain factor being based upon the contribution of the incident color channel signal ~~signal's contribution~~ to total luminance of the display, and

subsequently recombining said first and second signal components into an exiting, modified color channel signal.

2. Cancelled.

3. (Currently Amended) ~~A~~ The method according to claim 1, wherein ~~the first and second signal components are respectively a low pass component and a high pass component, and~~

applying a gain factor to one of said signal components includes applying the gain factor only to said high-pass component.

4. (Currently Amended) ~~A~~ The method according to claim 2, wherein said low-pass component is realized by means of a low-pass filter, and said high-pass component is realized by means of a high-pass filter, said low-pass and high-pass filters being complementary.

5. (Currently Amended) ~~A~~ The method according to claim 1, further comprising the step of:

determining the gain factor for the one of said signal components based upon the incident color channel signal's contribution to total luminance of the

display, the gain factor being inversely proportional to the contribution of the color channel to the total luminance of the color matrix display.

6. (Currently Amended) A The method according to claim 1, further comprising the step of:

transmitting said exiting, modified color channel signal to a delay and up or downsampling block in order to provide the modified color channel signal with a suitable delay and scaling.

7. (Currently Amended) A color matrix display device having at least one pixel, said pixel being arranged to be controlled by means of an applied color channel signal, the display device having a control unit comprising:

a subdivision unit, for subdividing an incident color signal into a first and second signal component, the first signal component being a low pass component and the second signal component being a high pass component,

a gain factor application unit, for applying a gain factor to one of said components, the gain factor being based upon the incident color channel signal's contribution to total luminance of the display, and

a recombination unit, for subsequently recombining said first and second signal components into an exiting, modified color channel signal, being used to control said pixel.

8. (Currently Amended) A The color matrix display device as in claim 7, wherein the control unit determines the gain factor based upon the contribution of the incident color channel signal signal's contribution to total luminance of the display.

9. (Currently Amended) A The method according to claim 1, wherein the step of subdividing includes subdividing each of separate color channel signals for an image into a first and second signal component.

10. (Currently Amended) A The method according to claim 1, wherein the step of subdividing includes subdividing each of separate color channel signals for an image into a first and second signal component, and

wherein applying a gain factor includes applying a separate gain factor to one of the signal components of each separate color channel signal that is inversely proportional to the

contribution of said separate color channel signal to the total luminance of the color matrix display.

11. (Currently Amended) ~~A~~ The method according to claim 1, wherein
the step of subdividing includes subdividing a number N of different color channel signals, and
the step of applying a gain factor includes applying a separate gain factor, to one of the signal components for each color channel signal, that is about equal to the value of $1/N$ multiplied by the reciprocal contribution of the color channel signal to the total luminance of the color matrix display.

12. (Currently Amended) A color matrix display device for displaying images, the device comprising:
a plurality of pixels controlled by applied color channel signals; and a controller including
a subdivision unit to subdivide, for separate color channel signals, each color channel signal into a first and second signal component, the first signal component being a low pass component and the second signal component being a high pass component,
a gain factor application unit to apply, for each color channel signal, a gain factor to one of said components, the gain factor having a value that is determined from, and inversely proportional to, the contribution of the color channel signal to the total luminance of the color matrix display device, and
a recombination unit to recombine, for each color channel signal, said first and second signal components into a modified color channel signal that is used to control said plurality of pixels.

13. (Currently Amended) ~~A~~ The method according to claim 1, wherein applying a gain factor includes applying a gain factor that removes a visible aliasing term from the incident color channel signal.

14. (Currently Amended) ~~A~~ The method according to claim 1, wherein applying a gain factor includes applying a gain factor that sets constants of a visible aliasing term for the

incident color channel signal to zero to remove a visible aliasing term from the incident color channel signal.

15. (Currently Amended) A The device according to claim 12, wherein the gain factor application unit is configured and arranged to apply the gain factor that removes a visible aliasing term from the incident color channel signal.

16. (Currently Amended) A The device according to claim 12, wherein the gain factor application unit is configured and arranged to apply a gain factor that sets constants of a visible aliasing term for the incident color channel signal to zero to remove a visible aliasing term from the incident color channel signal.